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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/614,682	07/07/2003	Gary J. Ciarelli	3220-091CPA	7375
27572	7590	03/08/2005	EXAMINER	
HARNESS, DICKEY & PIERCE, P.L.C.			PARKER, FREDERICK JOHN	
P.O. BOX 828			ART UNIT	PAPER NUMBER
BLOOMFIELD HILLS, MI 48303			1762	

DATE MAILED: 03/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/614,682

Applicant(s)

CIARELLI ET AL.

Examiner

Frederick J. Parker

Art Unit

1762

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 November 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 17-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 17-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

Art Unit: 1762

## **DETAILED ACTION**

### ***Response to Amendment***

#### ***Election/Restrictions***

1. cancellation of non-elected claims 1-16 is acknowledged.

#### ***Specification***

2. The amendments to the abstract and title in response to the objections of the Previous Office Action are acknowledged and appreciated, and the Examiner withdraws the objections.

3. The rejections under 35 USC 102 of the previous Office Action have been withdrawn in view of amendment, and are replaced by the new rejections as discussed below.

#### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35

U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
  2. Ascertaining the differences between the prior art and the claims at issue.
  3. Resolving the level of ordinary skill in the pertinent art.
  4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
6. Claims 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hollstein et al US 4248379 in view of Minoura et al US 6050498.

Art Unit: 1762

Hollstein teaches a paint powder coating method comprising a series of powder paint sources/venturi pump/etc connected to a common manifold 15 (powder color changer assembly ) which are, in turn, connected to a common spray gun 12. Using figure 1 and the example on columns 6-7, powder 11a is selectively suctioned by venturi pump 18a from hopper source 13a to operatively connected manifold 15 via powder flow conduit 51a and then dispensed via spray gun 12. The powder is entrained in a flow of air (“conveying fluid”) which transports the powder to the gun as a fluid, a fluid being “Any material or substance that changes shape or direction uniformly in response to an external force placed upon it. The term applies not only to liquids but gases and finely divided solids” (Hawley’s Condensed Chemical Dictionary”, 13<sup>th</sup> Edition, page 507, 1997). As to claims 18-19, Hollstein further discloses a purging method, in which a series of valves flushes the venturi pump 18a and conduit 51a (col. 7, 3-22). Activation of a second series of valves 100,63,105,72 causes a two-step purge of the manifold 15, air line 16 and spray gun 12 of residual paint powder (col. 7, 30-65). The process may then be selectively repeated for another powder 11 b-d.

Providing a single pump in conjunction with a paint changer having inlets in fluid communication with plural powder paint sources is not disclosed.

Minoura et al teaches a paint color changing method and apparatus, apparently for liquid-based paints. The concept is to have a series of paint sources 2-7 for different color paints, each with a dedicated passage 10-15 and valving 20-25 leading to a single pump 30 (further comprising motor 65), which would act as a color changer assembly, and having inlets connected to the powder sources (see fig. 1, 4A, etc), which in turn is connected to a paint gun 62. On the top of column 2, it is stated:

Art Unit: 1762

paint gun is a common passage. Therefore, when the paint color is changed for example from white to red, it is not necessary for the dedicated passages to be washed, only the common passage from the pump to the paint gun need to be washed, and the time required for washing at the time of a color change can be shortened. Also, because as a result of the delivery passage connecting the pump to the paint gun being made a single common passage, it is possible for a single pump to be used, the construction of the painting apparatus can be made simple, and the painting apparatus can be made compact.

The use of a single pump therefore reduces cleaning time and simplifies/ reduces size of the apparatus, to provide process cost reduction (in accordance with page 5 of Applicants Response).

Thus, while Hollstein et al applies plural color powder paints via a fluid stream using multiple pumps, Minoura et al teaches the advantage of using a single pump connected via inlets to the plural paint sources, and subsequently enabling transport of a fluid paint stream to the spray gun. The Examiner further recognizes that Hollstein teaches a fluid powder stream whereas Minoura uses a fluid liquid-based stream, nonetheless the paint streams are both fluids so the concept of the single pump should provide the same expressed benefits. Therefore, it is the Examiner's position that it would have been an obvious variation to the skilled artisan to modify the use of the plurality of pumps of Hollstein et al with a single pump arrangement as taught by Minoura et al for fluid paints to derive the express benefits taught by the reference.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Hollstein et al by instituting the principle of a single pump arrangement as disclosed by Minoura et al as motivated by the express benefits of reducing cleaning time and simplifying/ reducing size of the apparatus to provide process cost reduction.

Art Unit: 1762

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frederick J. Parker whose telephone number is 571/ 272-1426. The examiner can normally be reached on Mon-Thur. 6:15am -3:45pm, and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shrive Beck can be reached on 571/272-1415. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1762

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Frederick L. Parker  
Primary Examiner  
Art Unit 1762

fjp